

## Health Concepts Biomedical Engineering final project:

### **Background:**

Biomedical engineering or medical engineering is the application of engineering principles and design concepts to medicine and biology for healthcare purposes. A big aspect of biomedical engineering is the development of prosthetics. Prosthetic are artificial body parts used to replace a lost or nonfunctioning body parts.

### Instructions:

For this final project you will choose a body part, study its anatomy, and create a functioning prosthetic of your own design using materials you have around your house.

#### Part 1:

- Gather information about the anatomy and functions of you body part/system.
- Create a detailed diagram of your selected body part
  - Label the bones and muscles or organs

#### Part 2:

- Once you have diagramed your body part, design and create a prosthetic or model that functions the same as your body part.
- You will then submit a video in which you explain how you designed the prosthetic, materials you used to create it, and you demonstrating your prosthetic in action.

### Tips for this assignment:

>I highly recommend doing a hand or leg as there are plenty of resources available online that can help in your prosthetic design.

>I recommend looking up designs that have already been created on the internet, remember you should be using items that you have around the house so you will need to be creative! I will post resources in Edmodo as well.

>Do not be worried if you product is not the prettiest or does not function completely properly, I am looking for effort not perfection.